

1 CLAIMS

2 1. [CURRENTLY AMENDED] In the j-laying of a pipeline from an offshore
3 floating vessel, the method for raising a pipe section from a horizontal position
4 proximate the deck of said floating vessel to alignment with a mast for being connected
5 to the end of the pipeline, comprising

6 providing a main support arm which is pivoted from proximately a horizontal
7 position to a position proximately parallel to said mast,

8 providing a rotational axis mounted on and approximately parallel to said main
9 support arm,

10 providing grabbers mounted on said rotational axis,

11 engaging said pipe section proximate said deck,

12 rotating said grabbers about the center of said rotational axis from a position below
13 said rotational axis to a second position above said rotational axis,

14 pivoting said main support arm and said pipe section to a position proximately
15 parallel to said mast, and

16 extending said pipe section [away from] moving along a radial direction from
17 said rotational axis [in a radial direction] to said mast.

18 2. [PREVIOUSLY AMENDED] The method of claim 1, further comprising extending
19 said grabbers to first position to engage said pipe section proximate said deck.

20 3. [PREVIOUSLY AMENDED] The method of claim 2, further comprising retracting
21 said grabbers to a third position closer to said rotational axis than said first position prior
22 to rotating said grabbers about said rotational axis to said second position.

1 4. [PREVIOUSLY AMENDED] The method of claim 3, further comprising moving
2 said pipe section from said second position to a fourth position for delivery to said mast
3 using a scissor mechanism.

4 5. [PREVIOUSLY AMENDED] The invention of claim 4, further comprising using a
5 force parallel to said rotational axis to extend and retract said scissor mechanism and
6 said grabbers proximately perpendicular to said rotational axis.

7 6. [PREVIOUSLY AMENDED] The invention of claim 5, further providing using
8 hydraulic cylinders to provide said force to extend and retract said scissor mechanism.

9 7. [CURRENTLY AMENDED] In the j-laying of a pipeline from an offshore floating
10 vessel, the method for raising a pipe section from a horizontal position proximate the
11 deck of said floating vessel to alignment with a mast for being connected to the end of
12 the pipeline, comprising

13 providing a main support arm which is pivoted from proximately a horizontal
14 position to a position proximately parallel to said mast about a pivot axis,

15 providing a rotational axis mounted on said main support arm proximately
16 perpendicular to said pivot axis,

17 providing grabbers mounted on said rotational axis,

18 moving [extending] said grabbers radially away from said rotational axis to a first
19 position a first distance from said rotational axis to allow said grabbers to engage said
20 pipe section proximate said deck,

21 rotating said grabbers about the center of said rotational axis from a position below
22 said rotational axis to a second position above said rotational axis,

23 pivoting said main support arm and said pipe section about said pivot axis to a
24 position proximately parallel to said mast, and

1 moving [extending] said pipe section away from said rotational axis to said mast.

2 8. [PREVIOUSLY AMENDED] The method of claim 7, further comprising extending
3 said grabbers from said second position to a fourth position for delivery of said pipe
4 section to said mast.

5 9. [PREVIOUSLY AMENDED] The method of claim 8, further comprising extending
6 said grabbers from said second position to said fourth position by a scissors
7 mechanism.

8 10. [PREVIOUSLY AMENDED] The invention of claim 9, further comprising using a
9 force parallel to said rotational axis to extend and retract said scissor mechanism.

10 11. [PREVIOUSLY AMENDED] The invention of claim 10, further providing using
11 hydraulic cylinders to provide said force to extend and retract said scissor mechanism.

12 12. [CURRENTLY AMENDED] A method of raising a pipe section from the deck of an
13 floating vessel to a mast for welding onto the end of a pipeline suspended from said
14 floating vessel for deploying said pipe section and the welded pipeline into the water as
15 a pipeline, comprising

16 providing a main support arm with a pivot axis proximate one end of said main
17 support arm,

18 providing a rotational axis along said main support arm proximately perpendicular
19 to said pivot,

20 mounting one or more grabbers on said rotational axis to engage said pipeline
21 section proximate said deck when said grabbers are in a first position;

22 rotating said one or more grabbers to a second position relative to said main
23 support arm,

1 pivoting said main support arm from a generally horizontal angle to a generally
2 vertical angle, and

3 moving [extending] said pipe section away from said rotational axis to said mast.

4 13. [ORIGINAL] The method of claim 12, further comprising moving said grabbers
5 to a third position closer to said rotational axis prior to rotating said one or more
6 grabbers to said second position.

7 14. [PREVIOUSLY AMENDED] The method of claim 13, further comprising moving
8 said pipe section from said first position to said third position using a scissor
9 mechanism.

10 15. [ORIGINAL] The method of claim 12, further comprising extending said
11 grabbers to a fourth position further from said rotational axis than said second position
12 while delivering said pipe section to said mast.

13 16. [PREVIOUSLY AMENDED] The method of claim 15, further comprising moving
14 said pipe section from said second position to said fourth position using a scissor
15 mechanism.

16 17. [PREVIOUSLY AMENDED] The invention of claim 16, further comprising using a
17 force parallel to said rotational axis to extend and retract said scissor mechanism.

18 18. [PREVIOUSLY AMENDED] The invention of claim 17, further providing using
19 hydraulic cylinders to provide said force to extend and retract said scissor mechanism.

20 19. [CANCELLED]

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